

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE



In re Application of

Yuan-Sheng Tyan, et al

MICROCAVITY OLED DEVICES

Serial No. 10/771,885

Filed 04 February 2004

Group Art Unit: 2879

Examiner: To Be Assigned

I hereby certify that this correspondence is being deposited today with the United States Postal Service as first class mail in an envelope addressed to Commissioner For Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Valerie J. Richardson
Valerie J. Richardson
October 29, 2004
Date

Commissioner for Patents
P.O. Box 1450
Alexandria, VA. 22313-1450

Sir:

**SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT FOR
CONSIDERATION BY THE OFFICE UNDER 37 C.F.R. 1.97-1.99**

Enclosed herewith are patents and/or publications for consideration by the Patent and Trademark Office in regard to the invention claimed in the above-described application. In compliance with §1.56, such documents are listed in the enclosed Form PTO-1449.

Applicants request that the Patent and Trademark Office make of record the above-identified documents. A full text copy of each document is attached, except for copies of U.S. patents and U.S. patent application publications. For documents not in English, an English translation or an equivalent English language patent or publication may be attached. Where a translation is not available, a concise explanation of the relevance of each document not in English is included either here or in the specification.

This Information Disclosure Statement (hereinafter "Statement") is submitted according to the following selected paragraph:

- I. ☒ This Statement is being filed under §1.97(b) within three months of the filing date of the application (other than a CPA), or before the mailing of a first Office action on the merits or before the mailing of a first Office action after the filing of a request for continued examination.
- II. ☐ This Statement is being filed under §1.97(c), with fee, **prior** to the mailing date of any of a final action, a notice of allowance or an action that otherwise closes prosecution in the application. Please charge the fee required by §1.17(p) to Eastman Kodak Company Deposit Order Account Number 05-0225. A duplicate copy of this Certification is enclosed.

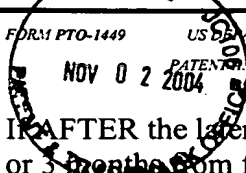
- III. ☐ This Statement is being filed under §1.97(c), with a certification under, §1.97(e) **prior** to the mailing date of any of a final action, a notice of allowance or an action that otherwise closes prosecution in the application. The undersigned hereby states that (check one):
- ☐ each item of information contained in this Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Statement.
- ☐ no item of information in this Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing this certification under §1.97(e) after making reasonable inquiry, no item of information contained in this Statement was known to any individual designated in §1.56(c) more than three months prior to the filing of this Statement.
- IV. ☐ This Statement is being filed under §1.97(d), with fee and certification under §1.97(e), on or after the mailing date of either a final action, a notice of allowance (but prior to payment of the issue fee) or an action that otherwise closes prosecution in the application. Please charge the fee required by §1.17(p) to Eastman Kodak Company Deposit Order Account No. 05-0225. A duplicate copy of this Certification is enclosed. The undersigned hereby states that (check one):
- ☐ each item of information in this Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Statement.
- ☐ no item of information in this Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing this certification under §1.97(e) after making reasonable inquiry, no item of information contained in this Statement was known to any individual designated in §1.56(c) more than three months prior to the filing of this Statement.

Respectfully submitted,



Attorney for Applicants
Registration No. 33,564

Andrew J. Anderson/vjr
Telephone: (585) 722-9662
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Enclosures

 <p>FORM PTO-1449 US DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE</p> <p>IF AFTER the later date of the first Office Action or 3 months from filing, use only with Rule 97(E) Certificate or Fee</p> <p>LIST OF ART CITED BY APPLICANT (Use several sheets if necessary)</p>		<p>Atty. Docket No. 85679AAJA</p> <p>Customer No. 01333</p>		<p>Serial No. 10/771,885</p>	
<p>Applicant: Yuan-Sheng Tyan, et al</p>		<p>Filing Date 04 February 2004</p>			
<p>Group 2879</p>					

U.S. PATENT DOCUMENTS						
Examiner Initial*	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	6737800	05-18-2004	Winters et al			
	2004/0140757	07-22-2004	Tyan et al			
	2004/0140758	07-22-2004	Raychaudhuri et al.			

FOREIGN PATENT DOCUMENTS						
Examiner Initial*	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)	
	US Serial No. 10/346,424; filed January 17, 2003; titled "Microcavity OLED Devices"; of Yuan-Sheng Tyan et al
	US Serial No. 10/356,271; filed January 31, 2003; titled "Color OLED Display With Improved Emission"; of Yuan-Sheng Tyan et al
	US Serial No. 10/368,513; filed February 18, 2003; titled "Tuned Microcavity Color OLED Display"; of Yuan-Sheng Tyan et al

EXAMINER	DATE CONSIDERED
<p><small>*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.</small></p>	

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		Atty. Docket No. 85679RLO Customer No. 01333		Serial No. To be assigned	
If AFTER the later date of the first Office Action or 18 months from filing, use only with Rule 97(E) Certificate of Use <div style="border: 1px solid black; border-radius: 50%; padding: 5px; display: inline-block; transform: rotate(-15deg);"> NOV 02 2004 LIST OF ART CITED BY APPLICANT (Use several sheets if necessary) </div>		Applicant Yuan-Sheng Tyan, et al			
		Filing Date 17 January 2003		Group	

U.S. PATENT DOCUMENTS						
Examiner Initial*	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	4,720,432	1/19/88	VanSlyke et al.			
	4,769,292	9/6/88	Tang et al.			
	5,608,287	3/4/97	Hung et al.			
	5,776,622	7/7/98	Hung et al.			
	5,780,174	7/14/98	Tokito et al.			
	6,137,223	10/24/00	Hung et al.			
	6,140,763	10/31/00	Hung et al.			
	6,208,075	3/27/01	Hung et al.			
	6,326,224	12/4/01	Xu et al.			
	6,406,801	6/18/02	Tokito et al.			
	5,776,623	7/7/98	Hung et al.			

FOREIGN PATENT DOCUMENTS							
Examiner Initial*	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
*	EP 0 891 121	1/13/99	EP			X	
*	EP 1 029 909	8/23/00	EP			X	
*	EP 1 154 676	11/14/01	EP			X	
*	JP 11-288786	19/19/99	Japan				X

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)	
	Handbook of Optical Constants of Solids II, edited by Edward D. Palik, Institute of Physical Sciences and Technology, University of Maryland
*	CRC Handbook of Chemistry and Physics, a Ready-Reference Book of Chemical and Physical Data, edited by David R. Lide, Ph.D., 83 rd Edition, 2002-2003
*	Handbook of Optical Constants of Solids, edited by Edward D. Palik, Naval Research Laboratory, Washington, D.C.
*	"High-efficiency top-emitting organic light-emitting devices", by M.-H. Lu, et al., Applied Physics Letters, Volume 81, Number 21, November 18, 2002, pages 3921-3923
*	"Electroluminescence of doped organic thin films", by C. W. Tang et al., J. Appl. Physics 65 (9), May 1, 1989, pages 3610-3616
*	"Radiation from oscillating dipoles embedded in a layered system", by Oakley H. Crawford, J. Chem. Phys. 89 (10), November 5, 1988, pages 6017-6027
*	"Organic electroluminescent diodes", by C. W. Tang et al., Appl. Physics Letter 51 (12), September 21, 1987, pages 913-915.
*	Metal oxides as a hole-injecting layer for an organic electroluminescent device", by Shizuo Tokito et al., J. Physics D: Appl. Phys. 29(1996), pages 2750-2752
*	"Rigorous optical modeling of multilayer organic light-emitting diode devices", by K. B. Kahan, Applied Physics Letters, Volume 78, number 12, March 19, 2001, pages 1649-1651.

*	"Microcavity organic light-emitting diodes on silicon", by Frederique Jean et al., Applied Physics Letters, Volume 81, number 9, August 26, 2002, pages 1717-1719		
*	"Polymer light-emitting diodes placed in microcavities" by M. Berggren, et al., Synthetic Metals 76 (1996), pages 121-123		
*	"Efficiency enhancement of microcavity organic light emitting diodes", by R. H. Jordan, et al., Appl. Phys. Letter 69 (14), September 30, 1996, pages 1997-1999		
*	"Control of emission characteristics in organic thin-film electroluminescent diodes using an optical-microcavity structure", by Noriyuki Takada, et al., Appl. Physics Letter 63 (15), octobe 11, 1993, pages 2032-2034		
*	"Physics and device applications of optical microcavities", by H. Yokoyama, Science Vol. 256, April 3, 1992, pages 66-70		
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* did not receipt